APPLICATION：

These microscopes are designed for teaching demonstration, experiment in universities and technical secondary schools as for other researches about microcosmic material world in other relative department. By choosing different objective and eyepiece, different total magnifications can be obtained. The maxium magnifications are 640x、1250x、1600x. Users can choose various combined types to meet their requirment.

SPECIFICATION：

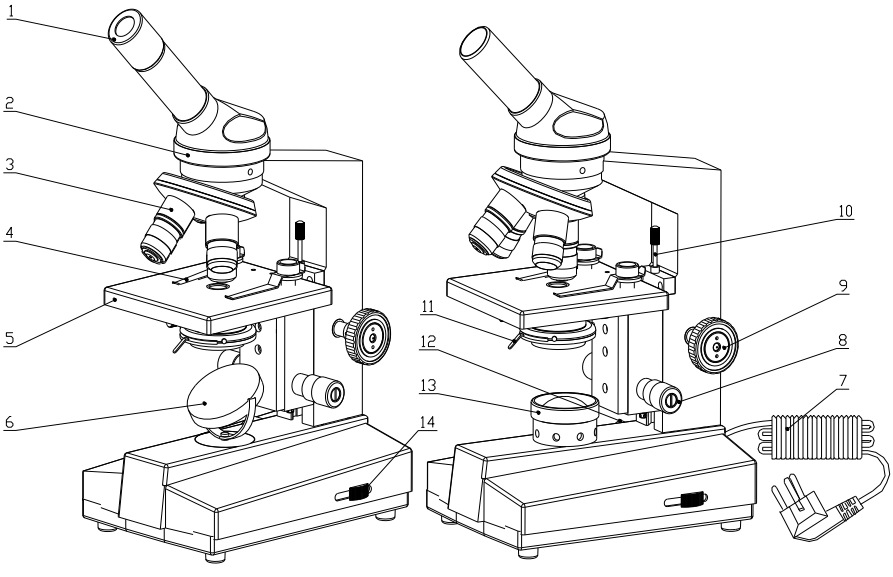
1. Mechanical tube length：160mm
2. Conjugate distance of objective：185mm or 195mm
3. Achromatic objectives：4x、10 x、40 x（R）、100 x（R）
4. Eyepieces:10x wide-field, H12.5x、P16x.
5. Marker chart of magnifications：

objective / eyepiece	4x	10x	40x	100x
WF10x	40x	100x	400x	1000x
H12.5x	50x	125x	500x	1250x
P16x	64x	160x	640x	1600x

6. Illumination：reflection mirror （its diameter is 50mm） or electric illuminator（220v / 20w、110v / 20w or 6v/30w）
7. State：Model M with built-in single len condenser
   N.A=0.65 • diaphragm
   Model N with built-in signal len condenser
   N.A=0.65 iris diaphragm
   Model O with built-in Abbe condenser
   N.A=1.2 iris diaphragm

8. Eyepiece tube：single, inclined at 45°, rotatable 360°.
Binocular, interpupillary distance between two eyepiece tubes is 55-75mm.

CONSTRUCTIONS：



1. Eyepiece 2.Monoculars 3.Objective 4.Clip 5. Stage
6.Reflecting Mirror 7. Power plug 8.Fine Knob
9.Coarse Knob 10.Locator 11.Condenser 12.Switch
13.Collector 14. Brightness adjuster

PRINCIPLES：

First an illuminated specimen is magnified linearly by an objective,

Then magnified visually by a eyepiece, so the observe can obtain an image magnified from 40x to 1600x.

OPERATION：

1. Place a specimen slide on the stage and clamp it firmly with Clips.
2. Screw the various magnifying objectives into the nosepiece one after another. Insert the chosen eyepiece into the eyepiece tube. If binoculars is in use, please adjust the interpupillary distance to be equal with observes eye distance.
3. Rotate the mirror until light reflects into the objective,（or put through the electric illumination source）, then adjust the aperture of iris diaphragm below the condenser until bright field of view is suitable.
4. Use low power objective to observe the object first and then move the objective to the center of the bright field of view, then with a high power objective to observe. When the 100xoil objective is in use, dip a little cedar wood oil with a clean wooden branch, drop it on the top of the objective, then rotate the objective into the optic system. It is necessary to be full filled cedar-wood oil between the objective and cover glass before observation.
5. When focusing, first turn the coarse focusing knob until an image is obtained, then turn the fine focusing knob until the image is clearest, when using high power objective. It is better to raise the objective from lowest position gradually to make it not in contact with the specimen slide to avoid any possible damage.

6. Regulate the condenser position and the aperture of diaphragm to get a bright and clear image.

MAINTENANCE：

1. The microscope should be replaced in the wooden box after use and it should be stored in a cool, dry place free from acid and alkali fumes.
2. The microscope has been carefully tested and checked. The objective and eyepiece should not be disassembled. If there is any dust, blow it off by means of a blower, and then brush it with a soft hair-brush. Oil stains can be removed by using a piece of fine clean soft cloth moisture with a little xylol.
3. Any dust on the mechnical parts of the instrument should be wiped off first and then rubbed with a clean fine cloth. Unvarnished sliding part should be applied with a thin layer noncorrosive lubricant.
4. The objectives should be covered and replaced in a box avoid dirt or crushing, after use.

OPTION：

Attached technical stage：

Model N stage

MODEL INDEX：

Model	Objectives	Eyepiece	Max.magn	Stage	Ill
XSP-31	4x,10x,40x	10x,16x	640x	Model M	Mirror
XSP-32	10x,40x,100x	10x,12.5x	1250x	Model O	Mirror
XSP-33	10x,40x,100x	10x,16x	1600x	Model O	Mirror
XSP-34	10x,40x,100x	10x,12.5x	1250x	Model O	elec.
XSP-35	10x,40x,100x	10x,16x	1600x	Model O	elec.
XSP-36	10x,40x,100x	10x,12.5x	1250x	Model O	elec.

* XSP-36 is equipped with binoculars.